STATEMENT OF BASIS (AI No. 10031)

for draft Louisiana Pollutant Discharge Elimination System permit No. LA0060291 to discharge to waters of the State of Louisiana.

THE APPLICANT IS: Red River Mining Company
Oxbow Lignite Surface Mine
Post Office Box 741
Coushatta, Louisiana 71019

ISSUING OFFICE: Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
Post Office Box 4313
Baton Rouge, Louisiana 70821-4313

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DATE PREPARED: October 31, 2005

1. PERMIT STATUS

Proposed reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term.

A. LPDES permit: Effective date - April 1, 1998
Expiration date - March 31, 2003

LPDES Multi-Sector General Permit - (LAR05N070)
Effective date: May 1, 2001
Issuance date: September 19, 2001
Expiration date: April 29, 2006

B. Date Application Received: The renewal application was received on September 19, 2002. Supplemental information needed to complete the permitting process was received on November 3, 2005, November 15, 2005, and November 17, 2005.

2. FACILITY INFORMATION

A. FACILITY TYPE/ACTIVITY - Lignite surface mine

This permittee operates an existing lignite surface mining facility uncovering 550,000 to 1,000,000 tons of lignite yearly for use as boiler fuel at an existing steam electric generating station. A dragline removes the overburden on top of the coal. A backhoe and trucks remove the lignite and carry it to a feeder breaker, breaking the lignite to a 6 inch by 0 product. The product is then loaded in trucks and shipped over the road to the power plant. Dozers reclaim the land after mining and the area is seeded, mulched, and planted with trees. Sedimentation ponds are designed and strategically located to capture all runoff from disturbed areas. The

water is tested and treated if necessary prior to discharge into the receiving streams. None of the water is utilized for any mining process.

The permittee has expanded its mining operation into the alluvial floodplain of the Red River. A second soil bentonite slurry wall will be constructed around the next mining area to hydraulically isolate the mining area from the surrounding alluvial aquifer. The slurry wall will create a dewatering cell where wells will be constructed to depressurize and dewater the alluvial aquifer prior to mining.

Water extracted by the dewatering wells will be collected and transported in collector pipes for discharge into a sedimentation pond (Outfall 009) which will then be discharged into Bayou Pierre.

B. FEE RATE
1. Fee Rating Facility Type: Minor
2. Complexity Type: IV; set using BPJ for SIC code 1211 - Bituminous Coal and Lignite Mining-Alkaline Mines [SIC code 1221 was not specifically listed in LAC 33:IX.1319.]
3. Wastewater Type: III
4. SIC code: 1221

C. LOCATION - Parish Road 604, 1 mile west of Armistead, in Coushatta, Red River Parish (Latitude 32°00'20", Longitude 93°23'47")

D. Technology Basis - 40 CFR Chapter I, Subchapter N (Effluent Guidelines and Standards) parts 401-402 and 404-471 have been adopted by reference at LAC 33:IX.4903.

Guideline	Reference
Coal Mining	40 CFR Part 434, Subparts D, E, and F

Other Sources of Technology Based Limits:
Previous NPDES permit (effective May 2, 1987)
Current LPDES permit (effective April 1, 1998)
Exterior Vehicle Wash Wastewater General Permit (LAG750000)
Best Professional Judgement

3. OUTFALL INFORMATION

Outfall 001

Discharge Type: Combined mine drainage from active mining areas, stormwater runoff, treated sanitary wastewater, and truck rinse water
Treatment: Flocculation
Location: At the point of discharge from Pond E1 prior to combining with other waters (Latitude 32°00'23", Longitude 93°23'48")

Flow: 6.8 MGD, Max 30-Day (Based on flow values reported in the facility's DMRs for the monitoring period of September 2003 to September 2005.)
Discharge Route: Unnamed drainage ditch, thence to Pigpen Bayou, thence to Bayou Pierre

Outfall 002

Discharge Type: Combined mine drainage from post-mining areas and stormwater runoff
Treatment: Flocculation
Location: At the point of discharge from Pond E2 prior to combining with other waters (Latitude 32°00'57", Longitude 93°24'21")
Flow: 2.0 MGD, Max 30-Day (Based on flow values reported in the facility's DMRs for the monitoring period of September 2003 to September 2005.)
Discharge Route: Unnamed drainage ditch, thence to Shell Bayou, thence to Bayou Pierre

Outfall 003

Discharge Type: Combined mine drainage from post-mining areas and stormwater runoff
Treatment: Flocculation
Location: At the point of discharge from Pond W1 prior to combining with other waters (Latitude 32°00'23", Longitude 93°24'25")
Flow: 1.6 MGD, Max 30-Day (Based on flow values reported in the facility's DMRs for the monitoring period of September 2003 to September 2005.)
Discharge Route: Unnamed drainage ditch, thence to Shell Bayou, thence to Bayou Pierre

Outfall 004

Discharge Type: Combined mine drainage from post-mining areas and stormwater runoff
Treatment: Flocculation
Location: At the point of discharge from Pond W2 prior to combining with other waters (Latitude 32°00'14", Longitude 93°24'35")
Flow: 11.7 MGD, Max 30-Day (Based on flow values reported in the facility's DMRs for the monitoring period of September 2003 to September 2005.)
Discharge Route: Unnamed drainage ditch, thence to Shell Bayou, thence to Bayou Pierre

Outfall 009

Discharge Type: Combined mine drainage from active mining areas and stormwater runoff
Treatment: Flocculation
Location: At the point of discharge from Pond E5 prior to combining with other waters (Latitude 31°58'46", Longitude 93°23'57")

Flow: 34.5 MGD, Max 30-Day (Based on flow values reported in the facility's DMRs for the monitoring period of September 2003 to September 2005.)
Discharge Route: Unnamed drainage ditch, thence to Shell Bayou, thence to Bayou Pierre

Outfall 010

Discharge Type: Combined mine drainage from post-mining areas and stormwater runoff
Treatment: Flocculation
Location: At the point of discharge from Pond W3 prior to combining with other waters (Latitude 31°59'17", Longitude 93°24'20")
Flow: 5.8 MGD, Max 30-Day (Based on flow values reported in the facility's DMRs for the monitoring period of September 2003 to September 2005.)
Discharge Route: Unnamed drainage ditch, thence to Shell Bayou, thence to Bayou Pierre

4. RECEIVING WATERS

STREAM - Bayou Pierre via Shell Bayou or Pigpen Bayou

BASIN AND SEGMENT - Red River Basin, Subsegment No. 100606

DESIGNATED USES - a. primary contact recreation
b. secondary contact recreation
c. propagation of fish and wildlife
d. agriculture

5. CURRENT EFFLUENT LIMITATIONS

See APPENDIX A - LPDES permit limits

6. PROPOSED CHANGES

A. According to the 1997 Statement of Basis, the facility was designated as falling under 40 CFR 434, Subpart B NSPS (Coal Preparation Plants and Coal Preparation Plant Associated Areas). However, based on a review of previous permit rationales for this facility, the facility is listed as falling under 40 CFR 434, Subpart D NSPS (Alkaline Mine Drainage). Verbal communications with facility personnel (Mr. George Hawkey) confirmed that the facility did not perform coal preparation plant or associated activities and did discharge only alkaline mine drainage from the active mining areas. Therefore, the facility has been re-designated as falling under 40 CFR 434, Subpart D NSPS. Subparts E and F have been added to the draft permit since they are also applicable to the permittee's facility type. These additional subparts were

established in the 1987 NPDES permit, but were not included in the current LPDES permit.

B. The complexity designation was revised to reflect IV instead of I based on BPJ using SIC code 1211 (Bituminous Coal and Lignite Mining-Alkaline Mine) and an existing permit issued to a similar facility. The SIC code (1221) listed in the application could not be located in LAC 33:IX.1319.

C. Outfall 001

The outfall description was revised to reflect the addition of truck rinse water based on information provided in the application.

An oil and grease (daily maximum) limit of 15 mg/L has been added to the draft permit which is consistent with the oil and grease limit established in LPDES General permit LAG750000 (Exterior Vehicle Wash Wastewater). The monitoring frequency will be 1/3 months using a grab sample. No soaps and/or detergents will be used.

D. Outfall 002

The outfall description was revised to reflect combined mine drainage from post-mining areas and stormwater runoff only.

The effluent limit and monitoring requirement for oil and grease has been removed from the draft permit since truck rinse water will not be discharged from this outfall.

E. The monitoring frequency for Flow, TSS, Total Iron, and pH at Outfalls 001 and 009 has been revised to reflect 1/week instead of 1/day. This reduction in monitoring frequency is based on the permittee's compliance with its current effluent limits for the monitoring period of July 2002 through September 2005.

F. The limit for Dissolved Oxygen (DO) at Outfalls 001 and 009 has been replaced by a reporting requirement based on the following: (1) This parameter is not listed in the effluent guidelines applicable for this facility type; (2) The sample data reported by the permittee for this parameter for the monitoring period of July 2002 through September 2005 is in compliance with the limit established for DO; and (3) There was no information available in the LDEQ records to justify the limit established for DO. The proposed reporting requirement for DO has been added to the draft permit for the purposes of gathering data for the TMDL. The monitoring frequency will be 1/month using a grab sample.

G. The monitoring frequency for Flow, Settleable Solids, and pH at Outfalls 002, 003, 004, and 010 has been revised to reflect 2/year instead of 1/day. This reduction in monitoring frequency is based on the following: (1) The length of time the ponds have been receiving mine drainage from reclamation areas (Outfall 002-14 years, Outfall 003-11 years, and Outfalls 004 and 010-5 years) and (2) The permittee's compliance with its current effluent limits for the monitoring period of July 2002 through September 2005.

H. A Part II provision has been added to the draft permit which allows the permittee to reduce the monitoring frequency for Flow, Settleable Solids, and pH from 1/week to 2/year for outfalls that discharge mine drainage from ponds placed in reclamation status after the effective date of the permit. This provision shall be activated after the permittee submits two (2) years of sample data which reflect concentrations at or below the daily maximum limit of 0.5 ml/l for Settleable Solids and within the range of 6.0 - 9.0 su for pH. The permittee shall notify this Office in writing within 30 days after placing a pond in reclamation status and within 30 days after satisfying the above specified requirement for the monitoring frequency reduction. The permittee shall include a statement as a comment on its first bi-annual DMR submitted following the reduction indicating that the requirement to submit two (2) years of sample data in compliance with the permit limits for the applicable outfall has been satisfied.

I. Outfalls 005, 006, 007, and 011 have been removed from the draft permit.

J. The outfall for treated sanitary wastewater (Outfall 008) has been removed from the draft permit as an external outfall and added as a combined wastestream with the effluent discharging from Outfall 001. This determination was based on the following: (1) The de minimis amount of sanitary wastewater being land applied over the open field; (2) The permittee's inability to collect a sample of the discharge due to absorption prior to it leaving the land application system; (3) The permittee's sanitary wastewater is not being discharged at a level which would cause or have a reasonable potential to cause or contribute to an effluent violation above any present state water quality standard; (4) Any discharge from the land application system flows into Pond E1 which ultimately discharges via Outfall 001; and (5) There is no potential for sanitary wastewater to flow off-site.

K. The precipitation event applicable to this facility has been revised to reflect a "10-year, 24-hour precipitation event" instead of a "25-year, 24-hour precipitation event" in accordance with 40 CFR 434, Subpart F.

L. The facility discharges to a 303(d) stream. Therefore, a reopener clause has been added to Part II of the draft permit in the event that the permit requires reassessment regarding 303(d) status resulting in incorporation of the results of any Total Maximum Daily Load allocation for the receiving water body.

7. PROPOSED EFFLUENT LIMITS

Outfall 001 - Combined mine drainage from active mining areas, stormwater runoff, treated sanitary wastewater, and truck rinse water

Parameter	Monthly Average	Daily Maximum	Frequency(*1)	Sample Type	Reference
Flow-MGD	Report	Report	1/week	Estimate	Current LPDES permit
Oil and Grease	---	15 mg/L	1/3 months	Grab	BPJ; LAG750000
TSS	35 mg/L	70 mg/L	1/week	Grab	Current LPDES permit
Total Iron	3 mg/L	6 mg/L	1/week	Grab	Current LPDES permit
Dissolved Oxygen	Report (min.)	---	1/month	Grab	BPJ; TMDL; Current LPDES permit
pH	6.0 S.U. (min)	9.0 S.U. (max)	1/week	Grab	Current LPDES permit

(*1) When discharging.

Outfalls 002, 003, 004, and 010 - Combined mine drainage from post-mining areas and stormwater runoff

Parameter	Monthly Average	Daily Maximum	Frequency(*1)	Sample Type	Reference
Flow-MGD	Report	Report	2/year	Estimate	Current LPDES permit
Settleable Solids	---	0.5 ml/l	2/year	Grab	Current LPDES permit
pH	6.0 su (min)	9.0 su (max)	2/year	Grab	Current LPDES permit

(*1) When discharging.

Outfall 009 - Combined mine drainage from active mining areas and stormwater runoff

Parameter	Monthly Average	Daily Maximum	Frequency(*1)	Sample Type	Reference
Flow-MGD	Report	Report	1/week	Estimate	Current LPDES permit
TSS	35 mg/L	70 mg/L	1/week	Grab	Current LPDES permit
Total Iron	3 mg/L	6 mg/L	1/week	Grab	Current LPDES permit
Dissolved Oxygen	Report (min.)	---	1/month	Grab	BPJ; TMDL; Current LPDES permit
pH	6.0 S.U. (min)	9.0 S.U. (max)	1/week	Grab	Current LPDES permit

(*1) When discharging.

8. COMPLIANCE HISTORY/DMR REVIEW

A. There are no open, appealed, or pending OES enforcement actions.

B. A DMR review of all of the monitoring reports for the period of July 2002 through September 2005 revealed that there were no effluent violations.

C. The most recent inspection was conducted on March 25, 2004. There were no areas of concern noted in the report.

9. ENDANGERED SPECIES

The receiving waterbody, Subsegment No. 100606 of the Red River Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U.S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated October 13, 2005 from Watson (FWS) to Gautreaux (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

10. HISTORIC SITES

The discharges are from an existing facility, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

11. TENTATIVE DETERMINATION

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue a permit for the discharges described in the application.

12. PUBLIC NOTICES

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the statement of basis. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

Public notice to be published in:

Local newspaper of general circulation

Office of Environmental Services Public Notice Mailing List

13. 303(d) ISSUE

Subsegment No. 100606 of the Red River Basin is listed on the 2004 Final Integrated Report as being impaired with nutrients, organic enrichment/low DO, and phosphorus. To date, no Total Maximum Daily Loading (TMDL) assessments have been completed for this waterbody. TMDLs for nutrients, organic enrichment/low DO, and phosphorus for this waterbody are scheduled for completion in 2007-2008. Based upon an evaluation of this facility's discharges (See Section 6.F), it was determined that the permittee does not have a reasonable potential to cause or contribute to an effluent violation above the state water quality standard for DO. However, until completion of the TMDLs for the Red River Basin, a reporting requirement has been placed in the draft permit for data gathering purposes in order to assist in TMDL decisions for this subsegment. In regard to nutrients and phosphorus, this Office has decided that reporting requirements for phosphorus or nutrients will not be placed in the draft permit since DO directly correlates with

overall nutrient impact. This determination is made through best professional judgment.

A reopener clause has been established in Part II of the permit to allow for more stringent or additional limitations or requirements to be placed in the permit, if needed, as a result of the TMDLs.

APPENDIX A

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

002

Outfalls 001, 003 - 007, 009 and 010, the intermittent discharge of combined mine drainage and stormwater runoff (estimated flow is 124.81 million gallons).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type
Flow-MGD	50050	—	—	Report	Report	1/day	Estimate (*2)
TSS	00530	—	—	35	70	1/day	Grab
Total Iron	01045	—	—	3	6	1/day	Grab
Dissolved Oxygen	00300	—	—	5 (*3) (Min)	—	1/day	Grab
pH Minimum/Maximum Values (Standard Units)	00400	—	—	6.0 (*4) (Min)	9.0 (*4) (Max)	1/day	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

See Appendix A and B.

FOOTNOTE(S):

(*1) When discharging.

(*2) See Part II, Paragraph G.

(*3) The minimum concentration shall not be less than 5.0 mg/L.

(*4) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

001
Outfall ~~002~~, the intermittent discharge of combined mine drainage and stormwater runoff and truck rinse water (estimated flow is 16.89 million gallons)

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type
Flow-MGD	50050	—	—	Report	Report	1/day	Estimate (*2)
Oil and Grease	00552	—	—	—	15	1/ 3 months	Grab
TSS	00680	—	—	35	70	1/day	Grab
Total Iron	01045	—	—	3	6	1/day	Grab
Dissolved Oxygen	00300	—	—	5 (*3) (Min)	—	1/day	Grab
pH Minimum/Maximum Values (Standard Units)	00400	—	—	6.0 (*4) (Min)	9.0 (*4) (Max)	1/day	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

See Appendix A and B.

FOOTNOTE(S):

(*1) When discharging.

(*2) See Part II, Paragraph G.

(*3) The minimum concentration shall not be less than 5.0 mg/L.

(*4) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 008, the discharge of treated sanitary wastewater (estimated flow is 500 gpd).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Weekly Average	Monthly Average	Weekly Average	Measurement Frequency	Sample Type
Flow-MGD	50050	—	—	Report	Report	1/6 months	Estimate
BOD_5	00310	—	—	—	45	1/6 months	Grab
TSS	00530	—	—	—	45	1/6 months	Grab
Fecal Coliform colonies/100 ml	74055	—	—	—	400	1/6 months	Grab
pH Minimum/Maximum Values (Standard Units)	00400	—	—	6.0 (*1) (Min)	9.0 (*1) (Max)	1/6 months	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts, nor of free oil or other oil materials, nor of toxic materials in quantities such as to cause acute toxicity to aquatic organisms. Furthermore, there shall be no visible sheen or stains attributable to this discharge.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

See Appendix A and B.

FOOTNOTE(S):

(*1) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

During the period beginning the effective date and lasting through the expiration date the permittee is authorized to discharge from:

Outfall 011, the intermittent discharge of mine dewatering from the well dewatering system (estimated flow is 6.5 MGD).

Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic		Discharge Limitations				Monitoring Requirements	
		(lbs/day, UNLESS STATED)		Other Units (mg/L, UNLESS STATED)			
	STORET Code	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	Measurement Frequency (*1)	Sample Type
Flow-MGD	50050	—	—	Report	Report	1/day	Estimate
TSS	00680	—	—	35	70	1/day	Grab
Total Iron	01045	—	—	3	6	1/day	Grab
Dissolved Oxygen	00300	—	—	5 (*2) (Min)	—	1/day	Grab
pH Minimum/Maximum Values (Standard Units)	00400	—	—	6.0 (*3) (Min)	9.0 (*3) (Max)	1/day	Grab

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

See Appendix A and B.

FOOTNOTE(S):

(*1) When discharging.

(*2) The minimum concentration shall not be less than 5.0 mg/L.

(*3) The permittee shall report on the Discharge Monitoring Reports both the minimum and maximum instantaneous pH values measured.